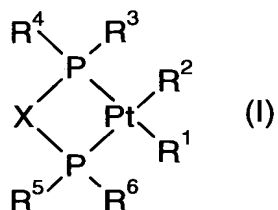
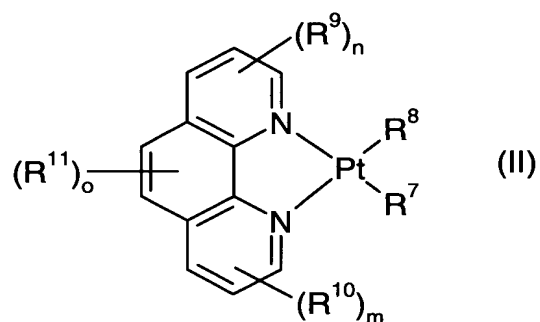


Claims

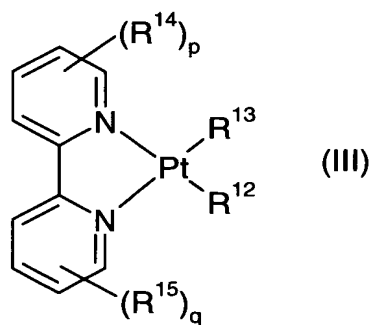
1. The use of uncharged platinum(II) complexes selected from the group consisting of
 5 platinum(II)-phosphine complexes of the formula (I),



- 10 platinum(II)-bathophen complexes of the formula (II)



- 15 and
 platinum(II)-bipyridyl complexes of the formula (III)



where the symbols have the following meanings:

$R^1, R^2, R^7,$

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- R^8, R^{12}, R^{13} are each, independently of one another, CN, acetylide, thiocyanate or isocyanate;
 $R^3, R^4, R^5, R^6, R^9, R^{10}, R^{14}, R^{15}$ are each, independently of one another, an aryl, alkyl, heteroaryl or alkenyl group;
 5 X is an arylene group or a heteroarylene group;
 o is from 0 to 2;
 p, q are each, independently of one another, from 0 to 4;
 n, m are each, independently of one another, from 0 to 3;
 10 as emitter molecules in organic light-emitting diodes.
2. The use according to claim 1, wherein, in the platinum(II)-phosphine complexes of the formula I, R^1 and R^2 are each CN or acetylide, preferably CN, and R^3, R^4, R^5 and R^6 are each an aryl radical, preferably unsubstituted phenyl, and X is selected from the group consisting of a phenylene group which is linked in the 1 and 2 positions to, in each case, one of the two P atoms in the formula I and is particularly preferably unsubstituted, a naphthalenediyl group which is linked in the 2 and 3 positions or 4 and 5 positions to, in each case, one of the two P atoms in the formula I and is particularly preferably unsubstituted, a phenanthrenediyl group which is linked in the 2 and 3 positions or in the 4 and 5 positions to, in each case, one of the two P atoms in the formula I and is particularly preferably unsubstituted, a 1,1'-biphenylene group which is linked in the 2 and 2' positions to, in each case, one of the two P atoms in the formula I and is particularly preferably unsubstituted, a 1,1'-binaphthylene group which is linked in the 2 and 2' positions to, in each case, one of the two P atoms in the formula I and is particularly preferably unsubstituted, and X is particularly preferably selected from among a phenylene group which is linked in the 1 and 2 positions to, in each case, one of the two P atoms in the formula I and is unsubstituted and a 1,1'-binaphthylene group which is linked in the 2 and 2' positions to, in each case, one of the two P atoms in the formula I and is unsubstituted.
3. The use according to claim 1, wherein, in the platinum(II) complexes of the formula II and the platinum(II) complexes of the formula III, R^7, R^8, R^{12} and R^{13} are each CN, m, n, p, q are each 0 or 1 and o is 0, and, when m, n = 1, R^9 and R^{10} are each unsubstituted phenyl and, when p, q = 1, R^{14} and R^{15} are each tert-Bu.
4. The use according to any of claims 1 to 3, wherein the platinum(II) complexes are mononuclear complexes.
- 40 5. The use of platinum(II) complexes according to any of claims 1 to 4 as light-emitting layer in OLEDs.

6. A light-emitting layer comprising at least one platinum(II) complex according to any of claims 1 to 4 as emitter molecule.
- 5 7. A light-emitting layer consisting of at least one platinum(II) complex according to any of claims 1 to 4 as emitter molecule.
8. An OLED comprising a light-emitting layer according to claim 6 or 7.
- 10 9. A device selected from the group consisting of stationary VDUs such as VDUs of computers, televisions, VDUs in printers, kitchen appliances and advertising placards, lighting, information signs and mobile VDUs such as VDUs in mobile telephones, laptops, vehicles and destination displays in buses and trains comprising an OLED according to claim 8.